

=> d his

(FILE 'HOME' ENTERED AT 15:01:36 ON 26 JAN 2005)

FILE 'CAPLUS' ENTERED AT 15:01:58 ON 26 JAN 2005

L1 97460 S CORTICOSTEROID OR CORTICOSTERONE OR DEXAMETHASONE OR PREDNISO  
L2 198853 S NICOTINE OR CANNABINOID OR AMPHETAMINE OR COCAINE OR CRACK OR  
L3 589 S L1(S)L2  
L4 463 S L3 NOT PY>=2001  
L5 19 S PREDNISOLONE(S)L2

FILE 'MEDLINE, BIOSIS, EMBASE, SCISEARCH' ENTERED AT 16:05:44 ON 26 JAN  
2005

L6 52 S L5  
L7 41 S L6 NOT PY>=2000  
L8 26 DUP REM L7 (15 DUPLICATES REMOVED)

=> s corticosteroid or corticosterone or dexamethasone or prednisolone or prednisone or prednylidene or triamcinolone or betamethasone paramethasone or fluorocortolone or deflazacort or cloprednol or fludrocortisone

20543 CORTICOSTEROID  
41723 CORTICOSTEROIDS  
47347 CORTICOSTEROID  
    (CORTICOSTEROID OR CORTICOSTEROIDS)  
24963 CORTICOSTERONE  
    163 CORTICOSTERONES  
25026 CORTICOSTERONE  
    (CORTICOSTERONE OR CORTICOSTERONES)  
30935 DEXAMETHASONE  
    17 DEXAMETHASONES  
30936 DEXAMETHASONE  
    (DEXAMETHASONE OR DEXAMETHASONES)  
10330 PREDNISOLONE  
    93 PREDNISOLONES  
10368 PREDNISOLONE  
    (PREDNISOLONE OR PREDNISOLONES)  
5735 PREDNISONE  
    16 PREDNISONES  
5736 PREDNISONE  
    (PREDNISONE OR PREDNISONES)  
    40 PREDNYLIDENE  
3668 TRIAMCINOLONE  
    9 TRIAMCINOLONES  
3670 TRIAMCINOLONE  
    (TRIAMCINOLONE OR TRIAMCINOLONES)  
2879 BETAMETHASONE  
    4 BETAMETHASONES  
2879 BETAMETHASONE  
    (BETAMETHASONE OR BETAMETHASONES)  
190 PARAMETHASONE  
    1 PARAMETHASONES  
191 PARAMETHASONE  
    (PARAMETHASONE OR PARAMETHASONES)  
    2 BETAMETHASONE PARAMETHASONE  
    (BETAMETHASONE (W) PARAMETHASONE)  
    11 FLUOROCORTOLONE  
184 DEFLAZACORT  
    44 CLOPREDNOL  
364 FLUDROCORTISONE

L1 97460 CORTICOSTEROID OR CORTICOSTERONE OR DEXAMETHASONE OR PREDNISOLONE OR PREDNISONE OR PREDNYLIDENE OR TRIAMCINOLONE OR BETAMETHASONE OR PARAMETHASONE OR FLUOROCORTOLONE OR DEFLAZACORT OR CLOPREDNOL OR FLUDROCORTISONE

=> s nicotine or cannabinoid or amphetamine or cocaine or crack or mdma or ecstasy

26218 NICOTINE  
    75 NICOTINES  
26226 NICOTINE  
    (NICOTINE OR NICOTINES)  
5237 CANNABINOID  
4161 CANNABINOIDS  
6089 CANNABINOID  
    (CANNABINOID OR CANNABINOIDS)  
17883 AMPHETAMINE  
    1666 AMPHETAMINES  
18356 AMPHETAMINE  
    (AMPHETAMINE OR AMPHETAMINES)  
18659 COCAINE  
    45 COCAINES  
18664 COCAINE  
    (COCAINE OR COCAINES)  
100494 CRACK  
    55582 CRACKS  
133228 CRACK

(CRACK OR CRACKS)

1301 MDMA

1 MDMA

1301 MDMA

(MDMA OR MDMA)

702 ECSTASY

L2 198853 NICOTINE OR CANNABINOID OR AMPHETAMINE OR COCAINE OR CRACK OR  
MDMA OR ECSTASY

=> s 11(s)12

L3 589 L1(S)L2

=> s 13 not py>=2001

4204004 PY>=2001

L4 463 L3 NOT PY>=2001

TITLE: The role of **corticosteroids** in  
**nicotine**'s physiological and behavioral  
effects

AUTHOR(S): Caggiula, Anthony R.; Donny, Eric C.; Epstein, Leonard  
H.; Sved, Alan F.; Knopf, Steve; Rose, Christine;  
McAllister, Cathy G.; Antelman, Seymour M.; Perkins,  
Kenneth A.

CORPORATE SOURCE: Department of Psychology, University of Pittsburgh,  
Pittsburgh, PA, 15260, USA

SOURCE: Psychoneuroendocrinology (1998), 23(2), 143-159  
CODEN: PSYCDE; ISSN: 0306-4530

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB This paper reviews evidence indicating that adrenal  
**corticosteroids** modulate the responsiveness of mice and rats to  
**nicotine**. Adrenalectomy increases, and both acute and chronic  
**corticosteroid** administration decrease, some of the physiol. and  
behavioral effects of **nicotine**. One function of adrenal  
steroids may be to regulate stress-induced changes in nicotine  
sensitivity. Another is to mediate the development of chronic tolerance  
when nicotine is given intermittently, and when the resulting tolerance  
has a learned component. A role of glucocorticoids in the development of  
tolerance to **nicotine** is suggested by the findings that a  
conditioned elevation of plasma **corticosterone**, which  
anticipates **nicotine** delivery, accompanies the development of  
chronic tolerance and that environmental cues evoke a conditioned  
**corticosterone** response, but only after they have become associated  
with **nicotine** delivery. The mechanisms by which adrenal  
steroids modulate nicotine sensitivity are not known, although recent in  
vitro evidence suggests that steroids can rapidly and reversibly reduce  
nicotinic receptor function. While most of the data are consistent with  
the hypothesis that **corticosteroids** reduce **nicotine**  
responsiveness, and thus promote a learned form of tolerance, there are  
new findings that **corticosteroids** increase the development of  
sensitization to the locomotor-activating effects of **nicotine**.  
These data suggest that formulations postulating a unidirectional effect  
of **corticosteroids** on **nicotine**'s actions (e.g.  
decreased sensitivity) must be revised to take into account interacting  
variables such as the specific **nicotine** effect being studied and  
whether that effect normally exhibits tolerance or sensitization.  
Finally, research is presented which indicates that the  
**corticosterone**-elevating effects of **nicotine**, previously  
reported for experimenter-administered drug, are also produced when  
**nicotine** administration is contingent on an operant response, and  
at a dose which sustains the development of **nicotine**  
self-administration in rats. These findings highlight the feasibility of  
using self-administration models in future explorations of the  
relationship between adrenal steroids and nicotine function.

REFERENCE COUNT: 87 THERE ARE 87 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT